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ABSTRACT

This document condenses the recommendations of 10 major reports: "The Paideia Proposal"; "America's Competitive Challenge: The Need for a National Response"; "High School: A Report on Secondary Education in America"; "Academic Preparation for College: What Students Need to Know and Be Able to Do"; "A Place Called School: Prospects for the Future"; "A Nation at Risk: The Imperative for Educational Reform"; "Educating Americans for the 21st Century"; "Meeting the Need for Quality: Action in the South"; "Action for Excellence: A Comprehensive Plan to Improve Our Nation's Schools"; "Report of the Twentieth Century Fund Task Force on Federal Elementary and Secondary Education Policy." The reports are summarized in four major areas: (1) recommendations about curriculum (goals, core curriculum, mastery of language, computers and new technology, vocational education); (2) recommendations about teachers and teaching (better training, better and different compensation, better working conditions, certification, connecting teachers with the outside world, teaching); (3) recommendations about school organization and management (administrative policy, staffing, structure of the school day/week/year); and (4) recommendations about process and roles: groups outside the school (federal government, state governments, school districts, colleges and universities, leaders outside education). Notes on the major recommendations are listed in tables. The document also includes a list of upcoming national reports. (PB)

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A Summary of Major Reports on Education

Education Commission of the States

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A Summary of Major Reports on Education

Education Commission of the States
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Additional copies of this publication may be ordered from the ECS Distribution Center at the Denver offices. Ask for EG-83-4, priced at $3.00 each. Prepayment or authorized purchase orders required.

List of Reports Reviewed

Adler, Mortimer Jerome. *The Paideia Proposal.* New York: Macmillan Publishing Co., 1982. $2.95.

Boyer, Ernest L. *High School: A Report on Secondary Education in America.* New York: Harper & Row, 1983. $15.00.

Business-Higher Education Forum. *America's Competitive Challenge: The Need for a National Response.* Washington, D.C., 1983. $17.50, 202-833-4716.

College Entrance Examination Board. *Academic Preparation for College: What Students Need to Know and Be Able to Do.* New York, 1983. No charge, 212-582-6210.

Goodlad, John I. *A Place Called School: Prospects for the Future.* St. Louis, Missouri: McGraw-Hill, 1983. $18.95.

National Commission on Excellence in Education. *A Nation at Risk: The Imperative for Educational Reform.* Washington, D.C.: Government Printing Office, 1983. Stock #065-000-00177-2, $4.50, 202-773-3238.

National Science Board Commission on Precollege Education in Mathematics, Science and Technology. *Educating Americans for the 21st Century.* Washington, D.C.: National Science Foundation, 1983. 202-357-7700.

Southern Regional Education Board. *Meeting the Need for Quality: Action in the South.* Atlanta, Georgia, 1983. $3.00, 404-875-9211.

Task Force on Education for Economic Growth. *Action For Excellence: A Comprehensive Plan to Improve Our Nation's Schools.* Denver, Colorado: Education Commission of the States, 1983. $5.00, 303-830-3600.

Twentieth Century Fund. *Report of the Twentieth Century Fund Task Force on Federal Elementary and Secondary Education Policy.* New York, 1983. $6.00, 212-535-4441.

In the months ahead, the recommendations of further reports will also be summarized and made available as addenda to this report.

Copies of this report are available from the Education Commission of the States Distribution Center, 300 Lincoln Tower, 1860 Lincoln Street, Denver, Colorado 80295, for $8.00. Discount available for bulk orders.

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Introduction

1983 has been the Year of the Report on Education. Hardly a month has passed without the release of a major report by a prestigious group of citizens concerned about the state of American education. And sprinkled between the major releases have been dozens of state task force reports, interim studies and articles about school renewal, effective schools, business-school partnerships or ways to meet the education needs of a rapidly changing society.

So voluminous has been the production of information about education and how to improve it that many people interested in the subject have been unable to keep up with the reading or unable to discern common themes among the recommendations. Since over 175 state task forces are already tackling complex education reform issues and many legislatures are putting education reform on their 1984 agendas, this is an opportune time to synthesize major report recommendations and look for consensus, common themes and areas of controversy.

Accordingly, the Education Commission of the States (ECS) has condensed the recommendations of 10 major reports in this summary and will update the summary periodically as major reports continue to emerge.

A document such as this can never replace the original reports, of course. We strongly recommend that readers use this summary as an *overview* and a *starting point*, not an end in itself. The reports we have summarized here are rich in details that elude easy summary. Many of them are powerfully written and carefully build contexts for their recommendations; when the contexts are stripped away, the recommendations appear distorted or stronger or weaker than they are in fact. One of the reports, *Making the Grade* by Twentieth Century Fund, presents both consensus recommendations and dissenting points of view, making it difficult to summarize without misrepresenting one or another panel member's point of view.

Yet another reason to be wary of a synthesis of these report recommendations is that they emanate from very different groups of people with different perspectives and agendas. Two of the reports — Goodlad's *A Place Called School* and Boyer's *High School* are based upon research studies and field work. They present detailed observational data about schools as they are today, and the authors' recommendations for improvement grow out of those data. Both Goodlad and Boyer would argue that we must understand the schools concretely before we attempt to change them or our reforms simply will not work.

If Goodlad's and Boyer's recommendations grow out of the concrete realities of schooling, the other report recommendations grow out of the realities of social change and the *need* for reform. These "blue ribbon" reports begin with macro-perspectives — usually the national or international economic situation — and deduce recommendations from those perspectives. Moreover, the blue-ribbon reports even differ among themselves in focus and agenda. *A Nation at Risk*, the report of the National Commission on Excellence in Education, was based upon hearings held around the country by a diverse group of educators and upon a number of commissioned papers, primarily from the postsecondary community. Like seven of the eight blue-ribbon groups, the Excellence Commission focused upon elementary and secondary education.

The Business-Higher Education Forum, which issued *America's Competitive Challenge*, is composed of corporate and university chief executives. The forum was primarily concerned with national education policy as it relates to American economic competitiveness in the world economy. The report embraces a range of national policy actions with respect to trade, capital investment, technological innovation, human resources, industry initiatives, university initiatives and joint industry-university initiatives. Thus, it is not strictly an education reform report and, to the extent that it does deal with education issues, it addresses postsecondary initiatives, not elementary/secondary.

Action for Excellence, the report of the Education Commission of the States' Task Force on Education for Economic Growth, also ties education initiatives to international competitiveness and economic policy. The task force membership largely consists of governors and business leaders, although legislators, educators and organization leaders are also included. In addition to making general recommendations about improving elementary/secondary education, the task force published nine brochures detailing more specific steps to be taken by governors, legislators, chief state school officers, state boards of education, local boards of education, school superintendents, principals and state higher education executive officers.

The Paideia Proposal, written by Mortimer Adler, reflects the views of the Paideia Group, a panel of distinguished educators in higher education, elementary/secondary education and education-related foundations. More than the other reports it presents a coherent *philosophy* of education in the ideal, concerning itself with how all students should learn and all teachers should teach. It is a manifesto concerned more with what we should be aiming to achieve than with current conditions in schools and the economy or with the details of how we could set out to reach its goals.

Making the Grade, the report of the Task Force on Federal Elementary and Secondary Education Policy of the Twentieth Century Fund, a non-profit research foundation, is the only report to focus exclusively on the federal role in education. Accordingly, the emphasis is upon policy, not practice, and since federal education policy is a matter about which there are conflicting perspectives, the task force found it necessary to include dissenting comments along with consensus recommendations.

The National Science Board Commission on Precollege Education in Mathematics, Science and Technology focused, as its name indicates, on only some aspects of education in its report, *Educating Americans for the 21st Century*. Nevertheless, its recommendations are broad and include observations about the importance of the humanities and communication skills for science students as well as for students in general.

Academic Preparation for College, published by the Educational EQuality Project of the College Board, is included in this summary because it is more specific than any of the other reports about what students should know and be able to do after 12 years of education. Although its thrust is clearly different from the other reports, it complements them nicely precisely because it is so detailed, especially on curricular matters.

Finally, we have included a regional report, *Meeting the Need for Quality: Action in the South*, by the Southern Regional Education Board, to remind readers that action is already taking place and there are many exemplary projects and policy initiatives from which we have already learned a great deal.

Apples and oranges — research studies, commissions, panels, foundations, greatly differing perspectives and values — and yet all of the reports address in their unique ways the common subject of American education. And undergirding them, for all their differences, are a number of shared assumptions:

- All agree that the quality of our education system must be improved and must be improved now.
- All agree that quality and equity are inseparable issues; as Adler puts it, "The best education for the best is the best education for all."
- All agree that education is inextricably tied to larger social, political and economic issues and that education renewal is key to American renewal.
- All agree that local government, state government and the federal government have important roles to play in renewal.
- Most mention (and probably all agree) that schooling is only one facet of education in this country and that lifelong learning through a host of public and private institutions and personal means will continue to be as central to renewed vigor and productivity as are schools.
- Most believe that schools and the larger community must work together; the challenge of renewal is a broad-scale social challenge not limited to the schools alone.
- Most underscore the belief that the strength of our education system lies in its decentralized structure and control by individual communities; communities will differ in their approaches to renewal and those differences will guarantee innovation, creativity and imaginative solutions to our problems.

As we will see shortly, those shared assumptions lead to a number of shared recommendations as well. In order to present both shared and unshared recommendations as cogently as possible, we have grouped them into four major categories: recommendations about curriculum, about teachers and teaching, about school organization and management and about the appropriate processes of reform and the roles various sectors can play in bringing about renewal. Although such a grouping may make it easier to compare recommendations, it poses an artificial barrier to understanding a fundamental assumption shared by virtually all the reports: that changes should not be considered in isolation from one another. Recommendations for curricular changes have implications for teacher preparation and use of time, and these have implications for how the school is organized and managed, and so on. Change strategies must be holistic in conception if they are to be successful. Furthermore, some recommendations are hard to place in a single category, since they involve interactions of teachers, administrators, curriculum and support systems outside the school.

Keep in mind, then, the fact that the categories are somewhat arbitrary and exist only to help the reader organize the information in a preliminary way.

Many groups have issued education reports and many more — most recently the Forum of Education Organization Leaders — have issued responses to their recommendations. In the coming months the Education Commission will continue to keep track of reports and responses and make summaries of them available to constituents and the general public.

Recommendations About Curriculum

All high school students should be required to learn five new basics, according to the *Nation at Risk* report, which then recommends specific numbers of courses in specific disciplines: four years in English, three years in mathematics, three years in science, three years in social studies and one-half year in computer science. *The Paideia Proposal*, on the other hand, recommends no specific courses but rather a system of learning and teaching that crosses course boundaries. Although these two approaches may at first glance seem to have little in common, there is nonetheless some broad agreement in the reports (widely different starting points notwithstanding) about goals, core curriculum, language mastery, computers and vocational education. Areas of general agreement are outlined below, as are some apparent limits to agreement. A real source of optimism is the liveliness of interest in curricular matters and agreement at the very broadest level that, in the words of *The Paideia Proposal*, "the best education for the best is the best education for all."

Goals

Schools' goals are mired in a "conceptual swamp," writes Goodlad; schools are expected to meet, in the curriculum and elsewhere in the schooling process, goals that are too cluttered and too global. Goals must be clarified, agrees Boyer. Other reports sound this theme as well. But agreement on the importance of clear goals may be more widespread than agreement on the goals themselves, since many of the groups issuing reports in effect propose their own goals for education. Groups with a strong interest in science and technology tend to emphasize those areas and downplay the humanities; groups that view education primarily as preparation for work tend to downplay goals having to do with personal fulfillment — and so on. Nevertheless there is strong support for the proposition that schools must continue to develop academic competencies, foster vocational skills and awareness, contribute to personal fulfillment and cultivate civic responsibility.

Core Curriculum

Agreement is general that all students should complete a core curriculum. The conclusion may not be new, but it is nonetheless significant in reports prepared by diverse groups for diverse purposes. Single-subject or single-method solutions to curriculum problems generally are not being proposed, and there seems to be some agreement that extraneous elements ("soft, nonessential courses," in the words of the ECS report) must be eliminated.

Already disagreements are apparent about the definition of "core curriculum," however, and they are likely to continue. Some reports describe the core as courses that should be required (and requirements vary). Goodlad takes a different approach, saying that a core curriculum should consist not of common courses but of a common set of concepts, principles, skills and ways of knowing. *The Paideia Proposal* recommends a common course of study based on three types of learning and teaching: acquisition of organized knowledge through didactic instruction, development of intellectual skills through coaching, and understanding of ideas and values through Socratic questioning and active participation. Other reports avoid problems of definition, recommending simply that the curriculum be strengthened.

Complicating problems of definition are convictions that some areas of learning should be more equal than others — convictions like one expressed in the report of the Business-Higher Education Forum: that engineering schools should reemphasize manufacturing engineering. Further, saying that a core curriculum is desirable is a different matter from instituting one, and conflicts may arise as difficult decisions are faced about how — or whether — schools can continue meeting numerous other demands as they develop or strengthen a core curriculum.

Mastery of Language

Two reports state unambiguously the importance of mastering language. This is the number-one priority, according to Boyer. Literacy in the English language is the most important objective of elementary and secondary education in the United States, according to the Twentieth Century Fund. Other reports assign a perhaps surprisingly high value to language (National Commission on Excellence in Education, National Science Foundation, Goodlad, Business-Higher Education Forum), given that many of them were issued by groups whose interest in business/economics, mathematics and science might have been expected to produce narrower curricular recommendations.

Computers and New Technology

Interest in determining what part computers should play in the curriculum is fairly widespread. A sense of possibilities to be explored predominates; uncertainty remains about how computers are best used in the curriculum.

In general, the use of technology seems to receive less emphasis in reports that deal extensively with how students learn (e.g., Boyer and Goodlad) than in reports prepared by groups that have less direct contact with schools. Note, too, that discussion of the possibilities of computers is not limited to considerations of curriculum. Interest surfaces, for example, in the National Science Foundation recommendation that students training to be K-12 teachers become computer-literate.

Vocational Education

Some reports suggest that vocational education be eliminated as a separate track, on the grounds that it is not an effective way to train students for work (a result best achieved by general education, says *The Paideia Proposal*) and that it has had other problems (minorities are overrepresented in vocational education, says Goodlad). Other reports explicitly or implicitly put vocational education outside the core curriculum. Agreement is less than complete, however, and the report of the Business-Higher Education Forum expresses a point of view (apropos of higher education) that doubtless has some support: immediate utility (e.g., more relevant industrial subjects to study) rather narrowly defined is in some circumstances preferable to general education.

There are, however, limits to consensus. Although the reports generally stress the importance of a core curriculum and of general education, various special educational topics or groups continue to have strong supporters. Some reports recommend accelerated courses for gifted students, for example; others address the concerns of the handicapped.

Disagreement is both possible and probable over recommendations specific to a specific report — over the soundness of Paideia theories, for example, or the exact allocation of required courses in *A Nation At Risk*, or the assertion in *Making the Grade* that federal funds now going to bilingual programs should be used to teach non-English-speaking children to speak, read and write English.

Perhaps most important, the reports generally do not limit recommendations to what is needed to develop technical or intellectual elites. They assume instead that better education means better general education for all students. One equally general potential for controversy remains. "Better general education for all students" is easier to agree on than to bring about, which makes disagreement over means both inevitable and understandable. Widespread and serious discussion of means may, however, be ultimately more productive than premature unanimity.

Recommendations About Teachers and Teaching

Agreement is general that getting better teachers into schools — and keeping them in schools, functioning effectively — are vitally important to improving education. Evidence of this general agreement is the attention the reports devote to better training, better compensation, better working conditions, certification, connecting teachers with the outside world, and teaching — concerns that are described further below.

Across the reports and within reports, recommendations for attracting good teachers and for retaining them are of two broad types — suggestions to encourage improvement (e.g., better training, better possibilities for career advancement) and suggestions to require improvement (e.g., higher standards for certification, dismissal of ineffective teachers). That is, the reports as a group testify to the popularity of the two-pronged attack; magnets should be used to attract good teachers, and screens should be used to keep out bad teachers. Unresolved by the reports, for the most part, is the problem of appropriately mixing assistance with regulation so that the two approaches are not counterproductive.

Better Training

Many of the reports stress the importance of better training for teachers. They suggest ways to improve the training of prospective teachers (by, for example, restructuring and renewing education school curricula, as the ECS report recommends) and also ways to further the professional development of practicing teachers. Boyer, for example, recommends cadet-teacher programs for students and, for practicing teachers, a two-week "teacher professional development term" and a "summer study term" with extra pay. An emphasis on academic training in particular is discernible in a number of reports. *The Paideia Proposal* recommends a strong liberal education as the best training for teaching; Boyer recommends that prospective teachers complete courses in an academic core in four years, then spend a fifth year learning about education. Also discernible is a changing attitude about education courses, found in the National Science Foundation's proposal that prospective teachers complete only a limited number of education courses, for example, and in Boyer's suggestion that teachers-in-training make more and earlier school visits.

Better and Different Compensation

Many of the reports agree that scholarships, loans or other financial incentives should be made available to able, highly qualified students who might not otherwise be attracted into teaching. Boyer may be most specific in proposing full tuition scholarships for the top 5% of students going into teaching, but other reports make the same general point.

Much broader in scope, more ambitious, doubtless more problematic yet also more consequential are recommendations that the teaching profession be restructured. The National Science Foundation report points out that compensation calculations must include considerations of intangible benefits like opportunity for promotion and length of work year. This synthesizing approach reappears in other reports recommending that "career paths" or "career ladders" be established that link differentiated compensation to differentiated teaching responsibilities.

Agreement has not yet been reached about how many steps there should be along a career path or how many rungs on a career ladder. Some reports talk of "master teachers," for example, others of "head teachers, residents and interns," others of "associate teachers and senior teachers." There is some agreement, however, that teachers further down the path or up the ladder should have different responsibilities from beginning teachers; suggested most often is supervisory responsibility for less experienced teachers. (Note, however, that the National Science Foundation report — in recommending that teaching salaries be "professionally competitive" and "market-sensitive" — introduces a criterion for compensation based not on performance in schools but on economics in the world outside.) There is also agreement that promotion to higher levels of responsibility should be based on systems of performance evaluation, not yet clearly defined but described in several reports as including review by fellow teachers. The ECS report stands alone in saying that ineffective teachers should be dismissed, although considerations of how, when and if this should happen are implicit in recommendations elsewhere.

Given the major consequences that restructuring the teaching profession holds for hundreds of thousands of teachers, thousands of districts, and all of public education, precisely how professional structures would work becomes a matter of great interest. The possibilities (and perhaps the need) for debate become correspondingly great. Discussions already under way indicate that agreement may not come easily or quickly.

It may also prove difficult to combine better pay for all teachers with better pay for better teachers. This approach (proposed, for example, in the Boyer, National Commission on Excellence in Education, National Science Foundation and ECS reports) may have

inherent contradictions, and it is far easier to recommend better pay than to finance it.

Better Working Conditions

Recommendations for improving working conditions for teachers cluster in three areas: providing teachers with more time for preparation, limiting nonacademic duties and distractions, and supporting the work teachers do in the classroom with school policies for making that work pleasanter and more productive. Goodlad suggests, for example, that teachers be allowed a 20-day summer planning period. Boyer proposes not only that teachers have a period each day for planning but also that their class load be limited to four classes and one period of helping students individually. (He also proposes that teachers be relieved of hall monitoring and that they be given special funds for special projects.) The National Commission on Excellence in Education recommends that school boards hire teachers for 11 months and suggests a number of ways, many of them echoed in the ECS report, that schoolwide policy can foster better working conditions: firm, fair codes of student behavior should be enforced consistently, for example, and attendance policies should have clear incentives and sanctions.

Certification

Widespread interest in exploring the possibilities of creating a complex, many-layered career structure for teaching seems to coexist with widespread interest in somehow simplifying the certification process, improving it, or making it more flexible. The Southern Regional Education Board report recommends, for example, that the complexity of certification be reduced, that states move to a common certification test, and that the graduate courses teachers take for recertification relate to teaching assignments. Other reports repeat similar themes, although specifics vary, and several reports (e.g., Boyer, the National Commission on Excellence in Education and the National Science Foundation) make a particular point of recommending that ways be found to let outside experts teach (for example, guest lecturers, members of teaching teams or part-time teachers).

Connecting Teachers With the Outside World

Less numerous than suggestions for bringing outside experts into teaching but nevertheless significant are suggestions for connecting teachers with the outside world. Boyer, who supports the idea of credentialing part-time teachers, also recommends in-and-out teaching terms and establishing a teacher travel fund in each school. The National Science Foundation report calls on outside organizations like government, business and the military to explore ways to extend the employment year for teachers.

Teaching

Some of the reports make recommendations to teachers rather than about them. (Recommendations of this sort are outside the scope of some reports, however, and the reports as a whole deal less with what happens when a teacher is in a classroom than with developments that precede or follow that central educational event.) Goodlad's recommendations are the most comprehensive. Teachers should, he says, make more use of mastery learning, teach in different ways (using different media to serve different purposes and to meet the needs of different students), diagnose student problems, give clear instructions, give helpful feedback, use time efficiently, provide personal attention, keep students engaged and teach higher-order skills. Reports that are less detailed in this area nonetheless make the same general points: teachers should be more flexible, and they should encourage students to engage actively in learning.

One final overall comment about recommendations for teachers and teaching seems appropriate. It may prove significant that the recommendations have been prepared by groups that may include teachers but predominantly consist of people outside teaching. This doubtless creates some possibilities for controversy, as teachers and groups of teachers respond to suggestions made by outsiders. But it probably also creates greater potential for progress in some areas. The reports as a group testify to the breadth of support for improving compensation for teachers, for example — improvement that would be much less likely if it were supported only by teachers.

Recommendations About School Organization and Management

Recommendations in this area for the most part fall into three major categories: administrative policy, staffing, and structure of the school day/week/year. Consensus is broader about the importance of addressing a particular problem than about how to resolve it effectively. The reports reviewed present 30 distinct recommendations, more than half of them (17) made in only one report.

Administrative Policy

Recommendations about administrative policy focus on the use of resources inside and outside schools, on increased emphasis in certain subject areas and on improved services to students.

Boyer, Goodlad and the Business-Higher Education Forum urge schools to use outside facilities and talent to improve and expand their offerings. This recommendation, though limited in endorsement here, is an underlying assumption in most, if not all, of the major reports under review.

The call for partnerships and shared responsibility for schools may indeed be the greatest commonality in the reports as a whole and the best guide to action in education for years to come.

Recommendations for an increased emphasis in certain subject areas focus on mathematics, science and technology. Boyer even calls for the creation of residential mathematics and science academies. This emphasis is consistent with the popular view of education largely as a means of economic growth. The lively debate about specialization versus the liberal arts or the appropriate role of the humanities does not surface here. Goodlad does, however, recommend that as much time be spent on literature and language each week as on mathematics and science. In a broader context, it is interesting to note that several of the more widely publicized reports call for less specialization by teachers in training yet seem to call for more specialization by students. Clearly, policy makers are challenged to assure balance between curriculum guidelines for teachers and for students.

Some recommendations for improving services to students have implications for all students; some pertain to particular student populations. Among the former are Boyer's call for expanded guidance services and smaller classes, Goodlad's blueprint for four phases of schooling, and calls in these and other reports for more homework, the elimination and social promotions, and the establishment of firm, fair codes of discipline and attendance. Recommendations on homework, the elimination of tracking and social promotions, and discipline and attendance made in two or more of the reports reflect moderate consensus. None of the five major reports that address tracking and social promotions (*High School, A Place Called School, A Nation at Risk, The Paideia Proposal* and *Action for Excellence*) calls for eliminating both tracking and social promotions, two recommendations seemingly on a collision course. The recommendation to eliminate tracking comes from *High School, A Place Called School,* and *The Paideia Proposal;* the recommendation to end placement by age instead of by achievement is endorsed by *A Nation at Risk* and *Action for Excellence.*

Recommendations to improve services for targeted populations are broad in scope but few in number. *High School, A Place Called School* and *Making the Grade* agree on the creation of schools within schools to meet the needs of special students. To the extent that these recommendations clash with recommendations to eliminate tracking, they present another challenge to policy makers. *High School* stands alone in recommending a reentry program for dropouts; *Action for Excellence* stands alone in calling for an expansion of programs for gifted and handicapped students as well as for increased participation of minorities and women in mathematics and science.

In general, recommendations about administrative policy are broad in focus, limited in consensus and, in at least two instances, potentially contradictory.

Staffing

Widely held views of the primacy of the principal's role in the school are reflected in recommendations offered by *High School, A Place Called School, The Paideia Proposal, Action for Excellence* and the Southern Regional Education Board. *High School* recommends that training for principals be the same as core training for teachers. *The Paideia Proposal* and *Action for Excellence* maintain that the principal should be viewed as the head teacher. *A Place Called School* directly opposes this view, stating that there is simply too much to be done for a principal to function as an instructional leader. A related recommendation from the Southern Regional Education Board suggests that on-the-job internships be required in all education administration programs so that new principals learn to follow the example of strong principals. *Action for Excellence* echoes a recommendation made elsewhere in other reports: create an equitable teacher evaluation system that periodically tests achievement and skills.

Structure of the School Day/Week/Year

Broad recommendations in this area call for flexibility in the scheduling of classes, a closer look at how time is spent in schools and consideration of extending the school day and year. Three of the 10 reports recommend extending the school day or year: *A Nation at Risk*, *Educating Americans for the 21st Century* and *Action for Excellence*. *A Place Called School* says that we must first see to it that we are using the present amount of time efficiently. And, in a recommendation that reflects his in-depth study of schools, Goodlad goes so far as to suggest how many hours of instruction should be devoted to particular topics each week: 18% of a student's time should be devoted to literature and language, 18% to mathematics and science, 15% to social studies and society, 15% to the arts, 15% to vocational education and career preparation and 10% to areas of individual choice. Such specificity, though rare, is not limited to Goodlad. (*Educating Americans for the 21st Century* also recommends very specifically that students spend 60 minutes a day on mathematics and 30 minutes a day on science.) More far-reaching than Goodlad's proposal for allocating student time is his proposal for the restructuring of schooling. Goodlad calls for four phases of schooling tied to age rather than to ability groupings.

Recommendations about school organization and management are many, but consensus is limited. The recommendations that have received the widest publicity call for examining the concept of an extended school day or year, ensuring the primacy of the principal in the school, and increasing time devoted to the subjects the *Nation at Risk* report calls the "new basics."

Somewhat threatening to the possibility for greater consensus over the long term is the tendency, already evident, to debate the specific merits of a specific recommendation without taking into account the context in which the recommendation was developed and offered. A case in point is Goodlad's proposal to subdivide schooling into four phases based on age. Critics have been quick to point out the organizational and financial difficulties of carrying out this proposal but perhaps not quick enough to see the proposal in context — or to seek opportunities to build consensus.

Recommendations About Process and Roles: Groups Outside the School

Recommendations about roles that groups outside the school are urged to play are presented below by type of group (federal government, state governments, school districts, colleges and universities, businesses and other leaders outside education). Although these are traditional categories, and the ones most often used in the reports, subdividing roles in this fashion does create some problems in the reports themselves and therefore in this synthesis. Perhaps the most significant problem: judging whether recommendations are coherent and workable can be difficult when responsibilities are allocated by level rather than across levels or throughout the education system.

Although recommendations about "process" are considered below as well as recommendations about "roles," the reports as a whole deemphasize process (*how* improvement should come about) in favor of more general points about what improvement seems desirable.

Particularly interesting in the reports are the recommendations about process or roles that groups make about themselves. When, for example, the National Science Foundation states that it should take the lead in promoting curriculum evaluation and development for mathematics, science and technology, the recommendation may have greater solidity and hold greater promise for action than if a group other than the National Science Foundation made the same point.

The Federal Government

With two exceptions (the College Board and Southern Regional Educational Board reports), all of the reports speak to appropriate roles for the federal government. Most of the recommendations focus upon the federal role with respect to special student groups, teachers, research and funding initiatives.

The reports generally concur that the federal government should continue to meet the needs and protect the rights of key groups of students. Mentioned specifically were poor, handicapped, gifted, sociologically disadvantaged, minority, language-minority and graduate engineering students.

Four reports call on the federal government to help improve the supply of *teachers*. Three reports (*A Nation at Risk, Educating Americans for the 21st Century, America's Competitive Challenge*) recommend that the federal government recruit and train teachers in areas of critical need, i.e., mathematics, science and technology; *High School* recommends the establishment of a National Teacher Service with tuition scholarships provided by the federal government.

Four reports agree that the federal government should collect *information* about education and conduct *research* on teaching, learning and the management of schools. *Making the Grade* goes beyond the recommendations of *A Nation at Risk, Educating Americans for the 21st Century* and *Action for Excellence* to call specifically for federal collection of data on performance of teachers, students and schools and for evaluation of all federally sponsored education programs. *A Nation at Risk* and *Educating Americans for the 21st Century* agree that the federal government should support curriculum development.

Recommendations for *federal funding initiatives* are numerous and varied. Boyer calls for the adoption of a national policy of full employment and the establishment of a "School Building and Equipment Fund." The Business-Higher Education Forum calls for a comprehensive national program for displaced workers, to be financed by employers, employees and the federal government. The Forum also calls for tax incentives to stimulate investment by industry in training and retraining workers and for the establishment of "Individual Training Accounts" (similar to Individual Retirement Accounts) that encourage people to save money to train or retrain themselves. Boyer urges the establishment of a National Commission on Computer Instruction, a National Film Library and regional Federal Technology Centers. The National Science Foundation urges the federal government to promote the use of science museums for education.

State Governments

Recommendations about the role states should play in improving the schools are fewer but broader than recommendations about the federal role. Goodlad has the most to say: states should develop long-term agendas for education, clarify roles and expectations, offer technical assistance, provide moral and financial support to school districts, clear roadblocks to progress and coordinate data gathering. The National Science Foundation concurs that states should offer technical assistance to districts, and further urges that states develop teacher training programs with colleges and universities, establish at least one regional training and resource center, and set rigorous standards for certification and for high school graduation. Boyer and Goodlad also stress the importance of internships, and Boyer recommends that states establish school-college coordination panels. The ECS task force calls for states and communities to form alliances and task

forces to identify goals and critical skills.

School Districts

Goodlad urges districts to hire and develop good principals, conduct studies, assess costs, empower each school to renew itself and establish centers to study pedagogy and curriculum. Boyer agrees on the importance of good principals, recommending that principals be given greater control of the budget, the allocation of resources and the selection and rewarding of teachers. Augmenting its recommendation that states set standards for certification of high school graduation, the National Science Foundation further recommends that districts set rigorous standards for grade promotion.

Colleges and Universities

Boyer and the College Board share the conviction that colleges and universities should establish partnerships with high schools. So does the National Science Foundation, which delineated some rather specific modes of cooperation: liberal arts colleges and academic departments should assume a much greater role in training of teachers; basic education courses should incorporate current findings of behavioral and social science; colleges and universities should stiffen entrance requirements in higher mathematics and science

Leaders Outside Education

Action for Excellence very strongly urges the involvement of business people and other leaders outside of education in improving our schools, and *High School, A Place Called School, Educating Americans for the 21st Century, Action for Excellence* and *A Nation at Risk*, all issue an invitation to business leaders to become more active, not only in supporting schools financially, but also in developing curricula and programs and in sharing nonfinancial resources.

Educating Americans for the 21st Century makes special mention of science museums, which it describes as potential training sites, and of broadcasts of scientific programs, for which it recommends substantial public and private financial support. *A Nation at Risk* calls on publishers to provide more information to textbook purchasers.

There is across these reports an undertone of conflicting mandates. On the one hand, there is wide agreement that school improvement begins at the school level. But, on the other hand, many of the role and process recommendations focus on what the federal government should do to improve schools. There is broad agreement that the federal government should continue providing for the needs of key groups of students. While the responsibilities of states for these matters are little mentioned, states instead are urged to define goals, raise standards and provide technical, financial and moral assistance to districts. Districts are asked to set rigorous standards for promotion and to support strong, autonomous principals. Generally, recommendations to leaders outside of government and education invite businesses and business people to assume a greater role in improving our schools.

Some Reports To Come

As we face what Boyer calls "the best opportunity for school renewal we will get in this century," national education reform reports continue to appear. Public and private task forces and study groups abound. The Education Commission of the States has identified 175 state-level task forces that are currently active or have reported their recommendations since early 1982.*

Policy makers and concerned citizens will want to inform their discussions with the very latest offerings from groups or individuals addressing similar concerns. We refer readers to the original documents reviewed here and to the following upcoming national reports.

Title: **Redefining General Education in the American High School**
Chair: Gordon Cawelti, Executive Director
Sponsor: Association for Supervision and Curriculum Development
225 North Washington St.
Alexandria Va. 22314
703-549-9110
(Available Dec. 1983)

Title: **Goal-Based Education Program**
Chair: Robert E. Blum, Project Director
Group: Northwest Regional Educational Laboratory
Sponsor: National Institute of Education
Washington, D.C. 20202
503-248-6800
(Preliminary report expected Dec. 1983)

Title: **A Celebration of Teaching: High Schools in the 1980s**
Chair: Theodore Sizer, Chair, and Arthur Powell, Executive Director
Sponsors: The National Association of Secondary School Principals and the Commission on Educational Issues of the National Association of Independent Schools
Dr. Theodore Sizer
18 Tremont St.
Boston, Mass. 02108
617-723-3625
(Available spring 1984)

Title: **An Education of Value**
Chair: Judith Block McLaughlin
Group: National Academy of Education
Sponsor: Lilly Foundation and the National Endowment of the Humanities
(Available early 1984)

Title: The Project on Information Technology and Education
Contact: Marc Tucker
Sponsor: Carnegie Corporation of New York
Project on Information Technology
1001 Connecticut Ave., N.W., Suite 301
Washington, D.C. 20036
202-463-0747
(Several articles are available)

Title: (Not determined)
Chair: Owen B. Butler
Group: Subcommittee on Business in the Schools
Sponsor: Committee for Economic Development
477 Madison Avenue
New York, New York 10022
212-688-2063
(Available 1984)

Title: **Computerized Factory Automation: Employment, Education and the Workplace**
Chair: Marjory Blumenthal
Group: Office of Technology Assessment
Joint Economic Committee of the U.S. Congress
Washington, D.C. 20501
(Available early 1984)

Title: **Education, Character, and American Schools**
Chair: Gerald Grant, Project Director
Group: Syracuse University
Sponsors: National Institute of Education and the Ford Foundation
"Good Schools Project"
Syracuse University
259 Huntington Hall
Syracuse, New York 13210
315-423-3343
(Several articles available at nominal charge)

Title: **The Study of Stanford and the Schools**
Chair: Donald Kennedy and J. Myron Atkins, Project Directors
Group: Stanford University
Sponsors: BankAmerica Foundation, Lilly Endowment, Education Foundation of America, David and Lucille Packard Foundation, California Department of Education, Center for Chicano Study, Stanford University, Stanford Center for Youth Development
415-497-2111
(Available 1985)

*Armstrong and Bush, *State Task Forces or Commissions on Education Issues*. STF-83-1 (1983). $10.00.

Tables:
Notes on Major Recommendations

A Place Called School, John I. Goodlad

Report

Sponsor: 14 foundations and agencies

Time Frame: Research done in late seventies, reported in 1983

Data Base: A study of schooling: 38 schools in 7 states; 8,600 parents; 1,350 teachers; 17,000 students, and 1,000 classrooms

Focus and Scope: Public schools only, K-12

Status: Work completed

Assumptions:

- Many signs of hope in renewal of schools
- No simple fixes
- Schools are complex ecosystems, each with its own ambience
- Need to know more about schools and their problems before you can reform them
- Improvement must happen one school at a time
- No single set of recommendations applies to all schools
- Nation needs its schools — but not necessarily the schools we have known
- Reforms cannot be thrust on schools by policy; policy must cultivate capacity of schools to renew themselves
- Environment of school must contribute to social, civic, personal and cultural goals
- Individuality, flexibility, creativity, originality must be fostered by schools

Curriculum

Academic

- Too much emphasis on facts and low-level skills
- Not enough discussing, writing, problem solving, analysis, etc.
- Big gap between ideals and practice must be narrowed. Teachers **say** they are teaching higher-order skills but they are not. Facts must be tied to concepts
- Core curriculum — not a common set of topics but a common set of concepts, principles, skills and ways of knowing

Vocational

- Voc-ed does not train for work, so do away with that rationale
- Correct minority overrepresentation in voc-ed
- Voc-ed could be used to teach through hands-on experience
- Students must be more able to switch back and forth between vocational and academic
- The best preparation for work is general education

Teachers/Teaching

- Teachers should be better able to:
  - Teach in different ways for different purposes
  - Vary medium, groupings, etc.
  - Diagnose student problems
  - Give clear instructions
  - Give positive, helpful feedback
  - Use time efficiently
  - Provide personal attention to student
  - Get and keep students engaged
  - Teach higher-order skills
- Teachers need more planning time
- Career ladders would help teaching: head teachers, residents and interns
- More use of mastery learning principles would help
- Create 20-day summer planning time for teachers

School Organization/ Management

- Schools should get more self conscious about:
  - How resources are allocated across subjects
  - How time is spent
  - How teachers are teaching
- Teachers too isolated; must be reorganized, collaborate more
- Eliminate tracking
- Principal can't really be instructional leader — too much to do
- Do time audits, aim for 25 hours of instruction per week
- Fewer well-used hours are better than more sterile hours
- Aim for:
  - 18% of student's time on literature and language
  - 18% of student's time on math and science
  - 15% social studies, society
  - 15% arts
  - 15% voc-ed/career preparation
  - 10% individual choice
- Develop schools within schools
- Create four phases of schooling:
  - Ages 4–7, primary
    8–11, elementary
    12–15, secondary
    16–18, service, work/study
- Create nongraded mini-schools, four teachers per 100 students
- Make better use of technology
- Create mentor programs
- Develop partnerships, networks
- Create policy and planning groups

Process/Roles

- **District** — hire and develop good principals; conduct studies, assess costs and empower each school to renew self
- **State** — develop long-term agenda; clarify roles of state, district, local
- **State** — lead and challenge
  - Clear expectations
  - Moral and financial support
  - Technical assistance
  - Coordinate data-gathering agencies
  - Clear road blocks
  - Legitimate reform
  - Develop tools for renewal
  - Disseminate knowledge about alternative pedagogy, curricular design, etc.
  - Establish centers to study pedagogy and curriculum

High School, Ernest Boyer

Report

Sponsor: Carnegie Foundation for Advancement of Teaching

Time Frame: 1980–83

Data Base: Goodlad's "A Study of Schooling"; Coleman's "High School and Beyond"; field study of 15 high schools, 25 observers, 2,000 hours of school visits

Focus and Scope: Public schools only, high schools only, schools as **educational** institutions

Status: Work completed

Assumptions:

- Quality and equity inseparable
- We are asking too little from students and schools
- This is best opportunity for school renewal we will get in this century
  - Dramatic changes in American life
  - More interdependent world
- Our best schools are among the best in the world
- Much good activity already taking place
- Schools serve four goals:
  - Develop capacity to think critically, communicate effectively
  - Help students learn about selves and human heritage
  - Prepare students for work and further education
  - Help students fulfill social, civic obligations
- Individuality, independence, active participation in learning must be fostered and supported by the school environment

Curriculum

Academic

- Goals must be clarified
- Mastery of language #1 priority
- Writing most important
- No more than 20 children in writing class
- Language proficiency assessment before high school; summer remediation
- One semester speech
- Core curriculum: Literature, arts, foreign language, history (U.S., western civilization or nonwestern civilization), groups and institutions (civics), science, mathematics, technology
- Interdisciplinary approach
- Senior Independent Project
- Elective cluster
- Learn **about** computers
  Learn **with** computers
  Learn **from** computers
- Accelerated courses for gifted

Vocational

- Voc-ed promise unfulfilled
- Abolish three-track system — academic, vocational, general
- Connect more with other institutions to get career education

Courses:

- The meaning of Vocation (Seminar on Work)
- Health
- Mobile career classroom
- Service term — students serve community for credit

Teachers/Teaching

- Teacher load = four classes and one period for helping individual students or small groups
- Teachers should have at least one hour a day for preparation and record keeping
- Exemption from monitoring halls, lunchrooms, etc.
- Teacher Excellence Fund in each school, enabling teachers to carry out special projects
- Good teachers should be recognized, rewarded publicly
- Average salary should be increased 25% over inflation during next three years
- Cadet teacher program for students
- Two-week Teacher Professional Development Term
- Teacher Travel Fund in each school
- Summer Study Term with extra pay
- Career path: associate teacher, senior teacher, evaluation by other teachers
- Credentialing separate from college, requires written exam, references
- Skilled part-time professionals: lectureship program, partnerships with business and industry, in-and-out teaching terms, part-time practitioner credential
- Need greater variety of teaching styles eliciting more active student involvement
- Teachers should have higher expectations for selves, students

(continued)

School Organization/ Management

- Guidance counseling must be expanded — more counselors, fewer children/counselor
- More flexible class schedule for larger blocks of time
- Small schools use off-campus, mobile facilities to expand offerings
- Large schools (2,000+) should create schools within schools
- Residential academies in math and science
- Reentry program for dropouts
- Eliminate tracking
- Principal training should be same as teachers' core training

Process/Roles

- **Parents:** Parent-Teacher-Student Advisory Council, Parent Volunteer Program and Citizens for Public Schools
- **Districts** give principals more control over budgets, resource allocation, selection and rewarding of teachers
- **States** should ease control over textbook selection and transfer that power back to districts or locals
- **States** establish School-College Coordination Panel
- **State** Board of Examiners for Teachers, majority being senior teachers
- **National** Teacher Service — federal tuition scholarship for teachers, three-year service
- **National** Commission on Computer Instruction
- **Federal** Technology Resource Centers in each region
- **National** Film Library
- **Federal** government — continue Title I
- **Federal** government: School Building and Equipment Fund to provide short-term, low interest loans for rehabilitation and lab equipment
- Every **college** or **university** establish partnership with a high school
- **Business** can provide: volunteer tutorial program, enrichment opportunities, cash awards for outstanding teachers, grants for outstanding principals, training facilities and help upgrade

High School (continued)

Report	Curriculum	Teachers/Teaching	School Organization/ Management	Process/Roles
		• More source materials, fewer textbooks • Full tuition scholarships for top 5% going intc teaching • Teachers complete core learning in **academic** area • 3.0 average to get into teacher program • School visits during junior, senior years • Fifth year education core: Schooling in America, Learning Theory and Research, Teaching of Writing, Technology and Its Uses, Classroom Observation and Teaching, and interdisciplinary seminars		

A Nation at Risk, National Commission on Excellence/U.S. Department of Education

Report

Sponsor: National Commission on Excellence/U.S. Department of Education

Members: 18 members — educators, business leaders

Time Frame: 1982-83

Data Base: Commissioned papers, public testimony offered both orally and in writing, and panel discussions

Focus and Scope: To assess quality of time and learning, make comparisons with other advanced nations, examine relationship of college admission to high school graduation, identify successful secondary programs, assess degree to which changes in last 25 years have affected student achievement, define problems to be faced and overcome if we are to pursue excellence

Status: Being reconvened, December 1983

Assumptions:

- Learning is lifelong
- Need for overall improvement
- Quality and equality not mutually exclusive
- Diversity, meeting individual needs still a value
- Education tied to larger societal goals, issues
- Federal government has an important unique role in identifying, promoting and supporting the national interest in education

Curriculum

Academic

- State and local high school graduation requirements should be strengthened
- All students should be required to take five new basics: four years, English; three years, mathematics; three years, science; three years, social studies; and one-half year of computer science. For the college-bound, two years of foreign language in high school are also strongly recommended
- Study of foreign language should be started in elementary grades
- High school curriculum should also include subjects that advance students personal, educational, occupational goals such as fine arts, vocational and performing arts
- Encourage continued efforts to revise, update, improve curricular materials

Teachers/Teaching

- Grades should be indicators of academic achievement
- Textbooks and other tools of learning and teaching should be upgraded and university scientists, scholars and members of professional groups should help
- Funds should be made available to support texts in "thin" market areas such as those for the learning disabled, gifted or talented
- Persons preparing to teach should meet high education standards, demonstrate an aptitude for teaching and competence in an academic discipline. College and university teacher preparation programs should be judged by how well their graduates meet these criteria
- Create career ladder with master teachers, probationary periods, etc.
- Master teachers should be involved in designing teacher preparation programs and in supervising teachers during their probationary years
- Salaries for the teaching profession should be increased, professionally competitive, market-sensitive and performance-based. Salary, promotion, tenure and retention should be tied to an effective evaluation system that includes peer review
- School boards should adopt an 11-month contract for teachers. This would ensure

(continued)

School Organization/ Management

- Standardized achievement tests should be administered at major transition points, particularly from high school to college or work
- Four-year colleges and universities should raise their admission standards and advise applicants of specific courses, performance and levels of achievement required
- High school students should be assigned far more homework
- Instruction in effective study and work skills should be introduced in the early grades and continued throughout school year
- School districts and state legislatures should strongly consider 7-hour school days as well as a 200- to 220-day school year
- Time available for learning should be expanded through better classroom management and organization of the school day. Additional time should be found to meet the needs of students who need more instructional diversity (i.e., gifted, slow learners, etc.)
- Burden on teachers for maintaining discipline should be reduced through the development of firm and fair codes of student conduct that are enforced consistently and, where indicated, alternative placement in rooms, programs or schools should be considered.

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Process/Roles

- **Citizens** should hold educators and elected officials responsible for providing necessary leadership. Citizens should provide fiscal support and stability required to bring about proposed reforms
- **Principals** and **superintendents** should develop school and community support for proposed reforms. School boards should develop leadership skills
- **State** and **local** officials including school board members, governors and legislators have primary responsibility for financing and governing schools and should incorporate reforms in their education policies and fiscal planning
- **Federal government,** in cooperation with states and localities, should help meet the needs of key groups of students such as gifted, socioeconomically disadvantaged, minority and language minority students
- **Federal** role includes:
  - Protecting constitutional and civil rights for students and personnel
  - Collecting data and information about education generally
  - Supporting curriculum development and research on teaching, learning and the management of schools
  - Supporting teacher training in areas of critical shortage or key national needs
  - Providing student financial

(continued)

A Nation at Risk (continued)

Report	Curriculum	Teachers/Teaching	School Organization/ Management	Process/Roles
		time for curriculum and professional development, programs for students with special needs and a more adequate level of teacher compensation • School boards, administrators and teachers should cooperate to develop career ladders that distinguish among beginning, experienced and master teachers • Incentives should be made available to attract outstanding students to the teaching profession, particularly in areas of critical shortage • Nonschool personnel resources should be employed to help solve immediate problem of shortages of math and science teachers. A number of our leading science centers can begin educating and training teachers immediately	• Attendance policies with clear incentives and sanctions should be used to reduce time lost through student tardiness and absenteeism • Administrative burdens on the teachers and intrusions on the school day should be reduced to add time for teaching and learning • Placement, grouping of students, promotion and graduation policies should be guided by the academic progress of students and their instructional needs, not their age	assistance and research and graduate training • **Federal** government has the primary responsibility to identify the national interest in education. It should also help fund and support efforts to protect and promote that interest and provide the national leadership to ensure the nation's public and private resources are marshaled to address the issues. • Four-year **colleges** and **universities** should raise their admission standards and advise applicants of specific courses, performance and levels of achievement required • **Textbook publishers** should provide widespread consumer information services for materials purchasers

America's Competitive Challenge — The Need for a National Response, Business-Higher Education Forum

Report

Sponsor: Business-Higher Education Forum

Membership: The Business-Higher Education Forum is made up of top corporate executives and university presidents

Focus and Scope: Prepared at the request of President Reagan. Directs the President to make industrial competitiveness one of the top economic goals for the United States

Time Frame: Now

Assumptions: While the report is primarily centered on economic matters, education is an essential ingredient for technological innovation and economic competitiveness. Report calls for education training and retraining for millions of people to keep abreast of new job needs. Industry and university cooperation will be needed to make the United States competitive in world markets

Curriculum

Academic
Curriculum recommendations directed to postsecondary institutions:

- Expanded study programs
- Curricular requirements in the fields of language, culture and social political institutions
- Postsecondary business schools should expand teaching and research goals to bolster industrial R&D efforts, technological innovation and high productivity and high quality. Engineering schools should reemphasize manufacturing engineering

Teachers/Teaching

No reference was made to the training or quality of teachers

School Organization/ Management

- Industry and university cooperation
- Transfer of research results to the commercial world
- More relevant industrial subjects to study
- Collaborative problem-oriented research
- An acceleration of the commercialization of the work of universities and industrial firms to be accomplished by new institutions in cooperative relationships
- Business and higher education should work together to develop better trend data on technological change

Process/Roles

- Comprehensive **national** displaced workers program modeled after the G.I. Bill, with education vouchers jointly financed by employers and employees and the federal government
- Tax incentives to stimulate additional investment by **industry** in education training and retraining of workers
- Individual training accounts (ITAs) similar to individual retirement account (IRA) to give incentives for individuals to save for their own training and retraining needs
- Special loans to graduate engineering students who agree to teach
- Support from public and private sectors to train secondary school science and mathematics teachers

Action for Excellence, Task Force on Education for Economic Growth

Report

Sponsor: Education Commission of the States

Members: 41 business leaders, educators, governors and legislators

Time Frame: Report published in June 1983

Data Base: Task Force deliberations, commissioned papers

Focus: K-12 education, national economy and international competition

Status: Continuing

Assumptions:

- Education tied to larger economic issues:
  - National survival
  - International competition: Japan, West Germany and others challenging America's position
  - Structural unemployment
  - Obsolescence of skills: importance of highly skilled human resources
  - Future success as a nation depends on our ability to improve education
- Education important for everyone. All citizens have a stake in how effectively we meet the challenge. All have a stake in economic health and growth
- Upgrade definition of basic skills, recognize importance of technology. Advancement of technology will greatly affect job opportunities and "learning to learn" skills. Just basic skills

(continued)

Curriculum

Academic

- Strengthen the curriculum, K-12, not only in math and science, but in all disciplines; provide richer substance and greater motivational program; eliminate soft, nonessential courses.
- Increase participation of women and minorities in math and science

Teachers/Teaching

- Every state and local education agency should "drastically improve methods for recruiting, training and paying teachers "
  - Competitive pay
  - Scholarships
  - Other financial incentives
  - Extraordinary rewards for extraordinary teachers
- Create career ladders
- Create equitable systems for assessing teachers
- Establish better preservice and inservice education programs
  - Restructure and renew curriculum
  - Manage and apply technology
- Media and business should create new forms of recognition
  - Special scholarships
  - Financial awards
  - Other tributes
- Improve process for certification of teachers and administrators
  - Higher standards
  - Flexible standards
- Tighten selection procedures; dismiss ineffective teachers

School Organization/ Management

- Expand programs for gifted
- Reduce absenteeism and dropouts
- Improve programs for handicapped
- Equalize resources
- Create firm, explicit and demanding requirements regarding discipline, attendance, homework and grades. Contracts among schools/students/parents
- Increase academic time
  - Limit class size
  - Examine school year for wasted time
  - Make learning time more effective
- Consider longer school day and year
- Develop periodic testing of achievement and skills
  - Link tests to remediation
  - Abolish social promotions
- Use effective management techniques
- Make better use of existing resources
- Provide more money
- Make principal instructional leader
- Relate pay for principals to responsibility and performance
- Create higher standards for recruiting, training and monitoring performance of principals

Process/Roles

- Each **school** district should develop a plan
- **States** and communities should identify skills
- **State** task force should build alliances
- **Federal** role — access, student aid, research
- Governor, legislators, state boards, business should develop school improvement plan
- Leaders outside education should take specific steps to improve schools
  - Marshal resources
  - Communicate skills
- Create partnerships with business
  - Team teaching
  - Courses

Action for Excellence (continued)

Report	Curriculum	Teachers/Teaching	School Organization/ Management	Process/Roles
will lead to economic stagnation • Need for closer relationship between business, labor and education • States and districts are major focus of action				

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The Paideia Proposal, Mortimer Adler

Report

Sponsor: Paideia Group

Members: 22 educators and scholars

Time Frame: Published in 1982

Data Base: Group deliberations

Focus and Scope: Public schools, K-12

Status: Continuing

Assumptions:

- Quality and equity inseparable
- Current system still inequitable because it puts some children on high track, some on low. "The best education for the best is the best education for all."
- Every child can learn; there are no unteachable children
- Education is lifelong; schooling is only part of it

Curriculum

Academic

- No electives
- Same three-part course of study for all:

Part One:

– Acquisition of organized knowledge by means of didactic instruction, lectures and responses, textbooks and other aids in three areas of subject matter: language, literature and the fine arts; mathematics and natural science; history, geography and other social studies

Part Two:

– Development of intellectual skills and skills of learning by coaching, exercises and supervised practice in reading, writing, speaking, listening, calculating, problem-solving, observing, measuring, estimating, exercising critical judgment

Part Three:

– Enlarged understanding of ideas and values by means of Socratic questioning and active participation in the discussion of books (not textbooks) and other works of art and involvement in artistic activities, e.g., music, drama, visual arts

(The three parts do not correspond to separate courses, nor is one kind of teaching and learning necessarily confined to any one class. Quality instruction involves all three types of learning.)

(continued)

Teachers/Teaching

- Teachers should engage students more actively in their learning
- Raise status, working conditions, pay of teachers
- Liberal education best preparation for teachers
- Teachers must learn how to teach in the three ways outlined for the core curriculum.

School Organization/ Management

- Eliminate tracking
- Provide more than 50-minute class for certain kinds of teaching
- Principal must be **head teacher**

Process/Roles

- **Schools** must renew themselves with help but not interference from governments
- **Federal** government — national policy of full employment
- **Federal** government should not interfere, but help schools renew themselves

The Paideia Proposal (continued)

Report	Curriculum	Teachers/Teaching	School Organization/ Management	Process/Roles
	Vocational • No **specific** voc-ed — best preparation is a good general education • Plus physical education, health, cooking, etc			

Making the Grade, Twentieth Century Fund

Report

Sponsor: Twentieth Century Fund

Members: 11 educators

Time Frame: Convened October 1981 and disbanded December 1982

Date Base: Task Force deliberations

Focus and Scope: To put forward proposals for a new federal policy on elementary and secondary schooling

Status: Work completed

Assumptions:

- Education tied to larger societal issues (economic and political)
- Public schools are the mainstay of the system
- Need overall improvement in schools
- The federal government is in the best position to focus public attention on vital importance of quality in schools
- Equality and excellence are not mutually exclusive
- The federal government must meet special needs of poor and minority students
- Good schools grow from the ground up

Curriculum

Academic

- Federal government should clearly state that the most important objective of elementary and secondary education in the United States is the development of literacy in the English language
- Federal funds now going to bilingual programs should be used to teach non-English-speaking children how to speak, read and write English*
- Every American public school student should have opportunity to acquire proficiency in a second language*
- Federal government should emphasize programs to develop basic scientific literacy among all citizens and to provide advanced training in science and mathematics for secondary school students
- Core curriculum of reading, writing, calculating, computers, science, foreign languages and civics

Teachers/Teaching

- Establish national master teachers program, funded by the federal government, that recognizes and rewards teaching excellence*

School Organization/ Management

- Special federal fellowships should be awarded to school districts to encourage the creation of small individualized programs staffed by certified teachers and run as small-scale academies for students unable to learn in the present setting

Process/Roles

- Executive and **legislative** branches of the **federal** government should emphasize the need for better schools and a better education for all young Americans
- **Federal** impact aid, originally aimed at helping cushion the burden imposed on local school facilities by the children of military personnel, should be reformulated to focus on school districts that are overburdened by substantial numbers of immigrant children
- Continue **federal** efforts to provide special education programs for the poor and handicapped
- Categorical programs required by the **federal** government should be paid for from the federal treasury
- **Federal** support for:
  - The collection of factual information about various aspects of the education system
  - The collection of information about the educational performance of students, teachers, and schools across the nation
  - Evaluation of federally sponsored education programs
  - Fundamental research into the learning process

*For dissenting opinions, please see the original text.

Educating Americans for the 21st Century, Commission on Precollege Education in Mathematics, Science and Technology

Report

Sponsor: National Science Foundation

Members: 20 educators, scientists, government officials and business/industry

Time Frame: Established April 1982; reported September 1983

Data Base: Hearings and other sources

Focus and Scope: Specific recommendations/solutions. Limited primarily to mathematics, science and technology education at elementary/secondary level

Status: Work completed

Assumptions:

- The nation should reaffirm its commitment to full opportunity and full achievement by all
- Nation is failing to provide its children with the intellectual tools needed for the 21st century
- New "basics" are needed by **all** students, not just the gifted and fortunate
- Goal: By 1995, the nation must provide, for all its youth, a level of mathematics, science and technology education that is the finest in the world, without sacrificing the American birthright of personal choice, equity and opportunity

Curriculum

Academic

- "Basics" of the 21st century include not only reading, writing, arithmetic, but also communication and higher problem-solving skills, and scientific and technological literacy.
- All secondary school students should be required to take at least three years of mathematics and of science and technology, including one year of algebra and one semester of computer science. All secondary schools should offer advanced mathematics and science courses. This requirement should be in place by September 1, 1985

Teachers/Teaching

- Top priority must be retraining, obtaining and retaining teachers of high quality in mathematics, science and technology, and providing them with a work environment in which they can be effective
- Raise standards for new teachers. Attract and retain superior talent, provide better training, better working conditions, and better compensation for high quality teachers
- Elementary mathematics and science teachers should have a strong liberal arts background, college training in mathematics and the biological and physical sciences, a limited number of effective education courses, and practice-teaching under a qualified teacher
- Secondary school mathematics and science teachers should have a full major in college mathematics and science, a limited number of effective education courses, and practice-teaching under a qualified teacher
- Both elementary and secondary teachers should be computer-literate. Teacher training should incorporate calculators and computers in mathematics and science instruction
- State and local school systems should draw upon the staffs of industry, universities, the military and other government departments, and retired

(continued)

School Organization/ Management

- Provide greater administrative and parental support for discipline and attendance, fewer classroom interruptions; needed equipment, materials and specialized support staff
- **School districts** should revise elementary school schedules to provide consistent and sustained attention to mathematics, science and technology: a minimum of 60 minutes per day of mathematics and 30 minutes per day of science in grades K–6; a full year of mathematics and science in grades 7 and 8
- Every **state** should establish rigorous standards for high school graduation, and local school districts should provide rigorous standards for grade promotion
- More time for mathematics, science and technology throughout the elementary and secondary grades. This would require that the school day, week and/or year be substantially lengthened

Process/Roles

- The **National Science Foundation** should lead in promoting curriculum evaluation and development for mathematics, science and technology. It should work closely with classroom teachers, technical experts from business and government, school boards and educational researchers, as well as with professional societies
- The **National Science Foundation** should provide seed money to develop training programs using the new information technologies
- The **National Science Foundation** should lead in evaluating progress in the application of new technologies, supporting prototype demonstrations, disseminating information, and supporting research on integration of educational technologies with the curriculum. These plans should not interfere with private initiatives now under way
- **Federal** government should anticipate an initial investment of approximately $1.51 billion for the first full year the recommended federal initiatives are in place ($829 million of this amount to be disbursed over three years at the rate of $276 million per year). During succeeding years the federal appropriation to decline — to approximately $680 million in the second year and $331 million in the sixth year

(continued)

Educating Americans for the 21st Century (continued)

Report	Curriculum	Teachers/Teaching	School Organization/ Management	Process/Roles
		scientists to provide qualified teaching assistance. Local systems should take actions to facilitate the entry and classroom training of such special teachers • School systems should explore means to adjust compensation, to compete for and retain high quality teachers in fields like mathematics, science and technology. Compensation calculations must include intangible benefits such as the length of the work year, promotion potential and similar factors • Local school systems, military and other governmental entities, and the private sector should explore ways to extend teachers' employment year while providing supplementary income and revitalizing experience • Provide means for teachers to move up a salary and status ladder without leaving the classroom.		• **State** governments should develop teacher training and retraining programs in cooperation with colleges and universities. The potential of science museums as sites for such programs should be recognized, encouraged and supported • Every **state** should establish at least one regional training and resource center where teachers can obtain supporting services such as computer instruction and software and curriculum evaluation • **States** should adopt rigorous certification standards, but not standards that create artificial bars to entry of qualified individuals into teaching • **States** should establish regional computer centers for teacher education and encourage computer use in the classroom for teaching and administration • The **federal** government should support research on the process of teaching and learning at both the basic level and the level of classroom application • It is a **federal** responsibility to assure that appropriate retraining is available. Inservice and summer training programs should be established with federal support. The Commission estimates the cost to the federal government of initiatives for retraining mathematics, science and technology teachers to be $349 million per year for five years. • The **national** and **state** education councils and school boards should work with school districts and schools to develop plans for implement-

(continued)

Educating Americans for the 21st Century (continued)

Report	Curriculum	Teachers/Teaching	School Organization/ Management	Process/Roles
				ing computer technologies in the classroom • Science broadcasts warrant continued and substantial **federal** support as well as **corporate** and other private support. **Federal** regulation of commercial stations should require a specific period of educational programming for children • The **federal** government should provide supplementary support to encourage a full spectrum of community and educational activities by science museums • **Liberal arts colleges** and academic departments need to assume a much greater role in training elementary and secondary teachers. Basic education courses should be revised to incorporate current findings in the behavioral and social sciences • **Professional societies,** schools, states and the nation should find ways to recognize the performance and value of the excellent teacher • **Colleges and universities** should phase in higher mathematics and science entrance requirements, including a second year of algebra; coursework covering probability and statistics; four years of high school science, including physics and chemistry; and one semester of computer science • **Top executives** in the computer, communication, and information retrieval and transfer industries should develop plans that, in a good, economical and quick way, enable school systems to use the technology

Academic Preparation for College: What Students Need to Know and Be Able to Do, The College Board

Report

Sponsor: The College Board

Members: Serving over a 10-year period are hundreds of secondary and postsecondary educators, administrators, counselors, parents and representatives of professional organizations

Time Frame: The Educational EQuality Project is a 10-year effort by the College Board, started in 1980 under College Board's Office of Academic Affairs and has involved hundreds of people in consensus-building

Data Base: Working committees

Focus and Scope: Designed to strengthen academic quality of secondary education and ensure equality of opportunity for postsecondary education for all students. Report details what college-bound students need to know and be able to do for success in college. Recommendations apply to students, educators and parents

Status: Continuing until 1990

Assumptions: The title of the project is meant to include both equality and quality, but more emphasis is given to quality with only implied recommendations for equality

Curriculum

Academic

Great detail on academic competencies and academic subjects. Broad intellectual skills essential for effective work in all fields of college study are:

- Reading
- Writing
- Speaking and listening
- Mathematics
- Reasoning and studying

These competencies are interrelated and interdependent with the basic academic subject areas.

Basic academic subjects: report outlines what successful college students will need to know and be able to do in English, the arts, mathematics, science, social studies and foreign language.

Teachers/Teaching

Teacher preparation not mentioned as such.

- Teachers should teach writing skills in every subject
- Teachers need to be aware of connections between a particular subject and the basic academic competencies

School Organization/ Management

College Board report gives no detailed recommendations in this area.

Process/Roles

- Establish a **network** of high schools and colleges for the exchange of ideas and mutual support in achieving higher outcomes

Meeting the Need for Quality: Action in the South, Southern Regional Education Board

Report

Sponsor: Southern Regional Education Board (SREB)

Members: 17 members of the SREB served on the task force

Time Frame: In 1981 the SREB finished a report called "The Need for Quality" issued by one of its own task forces on higher education in the schools. They accepted this task force report but extended the work of the group another two years and asked for the report again in 1983. The second report, released in the summer of 1983, entitled "Meeting the Need for Quality: Action in the South" was a progress report showing what action in the South was taken and what priorities still remain for further action

Data Base: Task Force deliberations

Focus and Scope: Generally the report focused on higher academic standards for high school graduation, higher college admission standards, higher college admission standards and higher standards for selection of teachers, including increased cooperation between higher education and the school of teacher education

Status: Ongoing

Assumptions: This report represents an effort by SREB to achieve education reform in southern schools and colleges

Curriculum

Academic

- New mathematics requirements must serve needs of college-bound, along with revitalizing the total mathematics program

Vocational

- States should appraise vocational education, looking at duplication of programs between various levels and market relevancy of vocational education

Teachers/Teaching

- Create better teacher selection process, including higher admission standards
- Reward outstanding teachers
- Create loans or scholarships for academically superior students going into the teaching profession
- Improve college teacher education programs
- College teacher preparation programs should be closely involved with the schools
- Reduce complexity of certification
- States should move to a common teacher certification test
- Colleges should ensure that graduate programs in education match the standards for admission to other advanced degree graduate programs
- Graduate courses taken by teachers for recertification should be relevant to the teaching assignment

School Organization/ Management

- Individuals selected for school administration programs should display the behaviors possessed by strong principals in the field
- On-the-job internships should be a strong requirement for all educational administration programs

Process/Roles

- **State board** should develop guidelines for use of computers in the schools

The Education Commission of the States is a nonprofit, nationwide interstate compact formed in 1966. The primary purpose of the commission is to assist governors, state legislators, state education officials and others to develop policies to improve the quality of education at all levels. Forty-eight states, American Samoa, Puerto Rico and the Virgin Islands are members. The ECS central offices are at 1860 Lincoln Street, Suite 300, Denver, Colorado 80295. The Washington office is in the Hall of the States, 444 North Capitol Street, N.W., Suite 248, Washington, D.C. 20001. It is the policy of the Education Commission of the States to take affirmative action to prevent discrimination in its policies, programs and employment practices.

Education Commission of the States
1860 Lincoln Street, Suite 300
Denver, Colorado 80295

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